What is claimed is:

1. A method for manufacturing an integrated optical circuit on a substrate, the substrate having a first region and a second region distinct from the first region, the method comprising the steps of:

forming a first mask on the substrate, the first mask defining a pattern corresponding to at least one optical device to be formed in the first region of the substrate;

forming a second mask on the substrate, the second mask defining a pattern corresponding to an optical structure to be formed in the second region of the substrate; and

etching the substrate in order to form the at least one optical device and the optical structure on the substrate.

2. The method of claim 1 further comprising the step of:

removing the first mask and the second mask.

3. The method of claim 1 wherein the step of etching is dry etching using a predetermined etching gas.

4. The method of claim 3 wherein the first mask and the second mask are each made of a material which substantially resists the predetermined etching gas.

5. The method of claim 3wherein the predetermined etching gas is a fluorine-bearing gas.

6. The method of claim 1 wherein the steps of forming the first mask and the second mask are carried out such that the first mask and the second mask overlay one another.

7. The method of claim 6 wherein the first mask has a first portion which overlays the second mask and a second portion which is in direct contact with the substrate.

8. The method of claim 1 wherein one of the first mask or the second mask is formed using an interference lithography technique and the other of the first mask or the second mask is formed using a UV exposure technique.

9. The method of claim 1 wherein the second mask is formed using an interference lithography technique and radiation, and the first mask is made of a material which is substantially insensitive to the radiation used in the interference lithography technique, so that the second mask may be formed after the formation of the first mask without affecting the first mask.

10. The method of claim 9 wherein the step of forming the second mask comprises the steps of :

forming a photoresist layer on the substrate; and

forming a pattern corresponding to the optical structure in the photoresist layer using the interference lithography technique.

11. The method of claim 9 wherein the first mask is made of a metal and the second mask is made of a photoresist material.

12. The method of claim 11 wherein the first mask is made of a metal selected fom the group consisting of nickel, chromium, or gold.

13. The method of claim 9 wherein the step of forming the first mask comprises the steps of :

forming a first layer on the substrate, the first layer being made of a material which is substantially insensitive to light;

forming a photoresist layer on the first layer;

patterning the photoresist layer using the UV exposure technique to obtain a photoresist pattern corresponding to the first region of the substrate;

etching the first layer using the photoresist pattern as the first mask; and

removing the photoresist pattern.

14. The method of claim 13 wherein the step of etching the first layer is wet etching.

15. The method of claim 9 wherein the first mask and the second mask are both made of a photoresist material, the first mask being a photoresist material which has been heated to remove its sensitivity to light.

16. The method of claim 15 wherein the step of forming the first mask comprises the steps of:

forming a photoresist layer on the substrate;

patterning the photoresist layer using a UV exposure technique to obtain a pattern corresponding to the first region of the substrate; and

heating the photoresist pattern to remove its sensitivity to light.

17. The method of claim 1 wherein the first mask is formed using a UV exposure technique and the second mask is made of a material which is substantially insensitive to UV radiation, so that the first mask may be formed after the formation of the second mask without affecting the second mask.

18. The method of claim 1 wherein the substrate is a silicon on insulator substrate.

19. The method of claim 1 wherein the optical structure is an array structure.

20. The method of claim 1 wherein the second region of the substrate is proximate to the first region.

21. The method of claim 20 wherein the array structure consists of a periodic array of irregularities.

22. The method of claim 21 wherein the array structure defines a frequency band gap.

23. The method of claim 21 wherein the array structure is a periodic array of holes.

24. The method of claim 21 wherein the array structure is a periodic array of rods.

25. The method of claim 21 wherein the at least one optical device is a waveguide.